

### **REMARKS**

Claims 10-32 are pending and at issue in the application with claims 10, 14-16, 22, 23, 27 and 28 being independent claims. Claims 10, 14-16, 23, 27 and 28 have been amended. Claims 1-9 have been canceled. Claims 31 and 32 have been added. As a result, 8 independent claims now exist in the application as compared to the 3 independent claims previously paid for, and 23 total claims now exist in the application as compared to the 30 total claims previously paid for. A check in the amount of \$1000.00 has been enclosed to cover the fee for consideration of 5 additional independent claims. However, the Commissioner is hereby authorized to charge any deficiency in the amount enclosed or any additional fees which may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 13-2855. Reconsideration and withdrawal of the rejections in view of the remarks below is respectfully requested.

Claims 14-21 and 23-29 were objected to as being dependent upon a rejected base claim, but were indicated as being allowable if rewritten in independent form. The applicants thank the Examiner for the indicated allowability of claims 14-21 and 23-29. As such, claims 14-16, 23, 27 and 28 have been amended to be independent, including all the limitations of their base claim and all intervening claims. As a result, the applicants submit that each of claims 14-21 and 23-29 is in condition for allowance

Claims 10 recites, *inter alia*, a circuit package that includes a first metal pattern disposed on a first surface of a base portion, a second metal pattern disposed on a second surface of the base portion and a third metal pattern disposed on the second surface. The second metal pattern is electrolytically plated with a metal of a first type and the third metal pattern is electrolytically plated with a metal of a second type different from the first type.

Claim 22 recites, *inter alia*, a circuit package that includes a substrate and a single heat sink. The substrate includes an opening and the heat sink is positioned in the opening such that a top surface is exposed through a top surface of the substrate and a bottom surface is exposed through a bottom surface of the substrate.

### **APPLICANTS' INTERVIEW SUMMARY**

On March 1, 2005, the applicants' attorney Aaron M. Peters (Reg. No. 48,801) conducted a telephonic interview with Examiner Lalrinfamkim Hmar Malsawma in which independent claims 1 and 22 were discussed. During that interview Examiner Malsawma indicated that claims 1 and 22, and all claims dependent thereon, would be considered as amended above. Although agreement was not reached with regard to all of the claims, Examiner Malsawma indicated that the amendments and accompanying remarks would be considered in light of performing an updated search.

During the interview it was discussed that Lee et al. does not disclose or suggest a metal pattern electrolytically plated with a metal of a first type and another metal pattern electrolytically plated with a metal of a second type different from the first type. While Lee et al. discloses electrically conductive patterns (312) disposed on a resin layer (311) (Fig. 3A), Lee et al. does not disclose or suggest that the electrically conductive patterns (312) are plated, much less plated with different metals. Consequently, the electrically conductive patterns (312) are not electrolytically plated with different metals. As such, Lee et al. does not disclose or suggest a metal pattern electrolytically plated with a metal of a first type and another metal pattern electrolytically plated with a metal of a second type different from the first type, as recited by claims 10-13, 17-21, 31 and 32.

Further during the interview, the Examiner agreed that Steele et al. does not disclose or suggest a single heat sink positioned in an opening of a substrate. While Steele et al. discloses a plurality of vertically stacked component modules(300a-300h) forming a vertical cooling channel, and a cold finger (520) disposed in the vertical cooling channel, none of the component modules (300a-300b) include an opening through which the heat sink is exposed. The vertical cooling channel does not comprise an opening in a substrate because the vertical cooling channel is formed by a plurality of stacked modules, as opposed to an opening in a substrate. As a result, Steele et al. does not disclose or suggest a single heat sink positioned in an opening of a substrate, as recited by claims 22 and 30.

Applicants respectfully submit that the amendments to the claims and the remarks presented herein have placed the application in condition for allowance. As such, amended independent claims 14-16, 23, 27 and 28 are believed to be in allowable form, as indicated by the Examiner. Amended independent claim 10 and independent claim 22 are also believed to

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be in allowable form. Further, dependent claims 11-13, 17-21, 24-26 and 29-32, which are dependent upon the aforementioned independent claims are also submitted to be in allowable form.

For the foregoing reasons, reconsideration and withdrawal of the rejections of the claims and allowance thereof are respectfully requested. Should the Examiner wish to discuss the foregoing, or any matter of form, the Examiner is urged to telephone the undersigned at the indicated number.

Respectfully submitted,

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